USER MANUAL (IN-APP, COMPLETE)

Advanced Tags

Online: mergenhub.envest.com.tr/docs/manual-advanced-tags

Derived Tags & Expression Engine

Advanced Tags creates new **calculated** tags from existing tags (equivalent to Advanced Tags) and publishes them to OPC under `_AdvancedTags`.

Derived (expression)	Math/logic expression: `{Tag1}*2 + {Tag2}`. Rate/trigger modes.
Average / Max / Min	Run-gated aggregation.
Delta Counter (Oracle Cumulative)	The **difference between two consecutive readings** of a cumulative counter (not the accumulated total). The first reading is the raw value; when the counter wraps around, `(Maximum - previous) + current`. E.g. with Maximum=100, readings 5, 45, 95, 4 → 5, 40, 50, 9. For an accumulated total use **Totalizer**.
Link (write-back)	Writes a tag to another device tag (Input→Output, Dead Value, Trigger/Link Mode/Rate).

Link Mode: "onChange" (write when the source changes), "onTrigger" (write with a trigger tag), "rate" (write periodically — Link Rate). The expression editor offers tag highlighting and multi-tag selection.

See also Expression Syntax Tags

Expression Syntax & Examples

In derived tag expressions, tags are referenced with `{Channel.Device.Tag}`. Supported operators/functions:

Arithmetic	`+ - * / %` and parentheses
Comparison / logic	`> < >= <= == !=`, `&& || !`
Functions	`abs, min, max, sqrt, pow, round, floor, ceil` etc.
Condition	ternary: `{a} > 10 ? 1 : 0`

EXAMPLE EXPRESSIONS

```
// İki debinin toplamı (m³/h)
{Modbus_1.1001.Debi_A} + {Modbus_1.1001.Debi_B}

// Yüzde doluluk
({Depo.1002.Seviye} / 5.0) * 100

// Yüksek-basınç alarm bayrağı (1/0)
{Kuyu.1003.Basinc} > 8 ? 1 : 0
```

Tip With **Link (write-back)** you can write a calculation result to another device's setpoint tag: Input = expression/source tag, Output = target device tag, Link Mode = onChange, with Dead Value as the noise threshold.